

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE J		PAGE OF PAGES 1   9	
2. AMENDMENT/MODIFICATION NO. 0001		3. EFFECTIVE DATE 22-Dec-2000		4. REQUISITION/PURCHASE REQ. NO. W26GLG-0278-7403		5. PROJECT NO.(If applicable)	
6. ISSUED BY CONTRACTING DIVISION US ARMY ENGR DIST NORFOLK ATTN: CENAO-CT 803 FRONT STREET  NORFOLK, VA 23510-1096		CODE DACW65		7. ADMINISTERED BY (If other than item 6) CODE  <b>See Item 6</b>			
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. DACW65-01-B-0001	
				X		9B. DATED (SEE ITEM 11) 05-Dec-2000	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended.  Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning <u>1</u> copies of the document; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN THE REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D.OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Technical Changes  POC Susan Hurst 757-441-7747 fax 757-441-7183 susan.i.hurst@usace.army.mil							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) SUSAN I HURST / ADDED BY SUMI			
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA  BY (Signature of Contracting Officer)		16C. DATE SIGNED 21-Dec-2000	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

## Changes in Section SF 30

1. Replace Sec 01055 of the specifications with the attached revised Sec 01055.
2. Section 02500, Paragraph 2.1. In the note for the Tensile Strength test, delete the words "Pounds per inch of core width" and replace with 'In terms of full core width'.
3. Section 02500, Paragraph 2.1. Change the value for water Permeability of the Geotextile from 0.03 cm/sec to 0.01 cm/sec.
4. Add the following note to Section 02500, Paragraph 2.1 in regards to the Discharge Capacity Test (ASTM D4716).

"ASTM D 4716 shall be run at an Applied Normal Compressive Stress of 60 psi, and a Gradient of 0.10. The test shall be run in a bladder, or other ASTM approved suitable method to eliminate leakage paths as stated in ASTM D 4716 Paragraph 9.2.1."

**The following are questions asked for clarification.**

5. Question: The Southwest Area (Bid Item 0002) extends into the water. This is also stated in note 11. What are the elevations/soundings in this area. This information is needed to determine the means necessary to install the drains in this area.

Answer: Elevation information is shown on the cross-sections, Sheets C-3 to C-7.

6. Question: The specifications call for the wick to be cut a maximum of 12" above the ground surface. Does this also apply in the Southwest Area or can the wick be cut at/above the water elevation?

Answer: When in the water cut the wick drains at or below CEMWL.

7. Question: Can any fill be temporarily placed if it is later removed in, say 30 days?

Answer: As stated in Note 11, Sheet C-2, no fill can be placed without proper permits, which would be the responsibility of the contractor to obtain.

8. Question: Can material be excavated from this area to make it deeper in order to allow floating equipment. If so, would it have to be restored or could it remain in a deepened condition?

Answer: No dredging is allowed without proper permits, which would be the responsibility of the contractor to obtain.

9. Question: What length of sample to be used in this test [in regards to test ASTM D 4716]?

Answer: As stated in ASTM D 4716, paragraph 7.5.1, Note 1, the specimen length is 14 inches.

10. Question: What is the length of the timed duration to be used in this test [in regards to test ASTM D 4716]?

Answer: As stated in ASTM D 4716, paragraph 9.5.1 The minimum seating period is 15 minutes, but can vary dependent on the compressive response of the material.

11. Question: In ASTM D638 what is the reference revision date of the test method desired to be used?

Answer: As shown in Section 02500, Paragraph 1.2, the revision date is 1999.

12. Question: Are the "VALUES" listed to be (1) the 'Typical Proposed' values, (2) the 'Minimum Proposed' values, or (3) either one of the values is acceptable?

Answer: The values shown must either fall within the given range, or exceed the value given, as indicated by the ">" and "=" symbols shown in paragraph 2.1 of Section 02500.

13. Wage Decision VA000009 is hereby incorporated into the subject contract. It is the secondary determination and is to be used for classifications not covered on the primary determinations.
14. Section 01440 pages 9-17 are intentionally blank and reserved for the following checklists that will be included in the section. They will be provided to the contractor following award of the resulting contract.

Section 01440 includes the following attachments.

(1) Preparatory Phase Checklist, (2) Initial Phase Checklist, (3) Daily Construction Quality Control Report, (4) Test Report, and (5) Deficiency Tracking Log.

**Attachment 2****General Decision Number VA000009**General Decision Number **VA000009**

Superseded General Decision No. VA990009

State: Virginia

Construction Type:  
HIGHWAY

County(ies):

CHESAPEAKE\*

NORFOLK\*

SUFFOLK\*

ISLE OF WIGHT

PORTSMOUTH\*

VIRGINIA BEACH\*

\*INDEPENDENT CITIES

HIGHWAY CONSTRUCTION PROJECTS (Excluding tunnels, building structures in rest area projects and railroad construction; bascule, suspension and spandrel arch bridges; bridges designed for commercial navigation; bridges involving marine construction and other major bridges)

Modification Number	Publication Date
0	02/11/2000
1	03/03/2000
2	06/02/2000

COUNTY(ies):

CHESAPEAKE\*

NORFOLK\*

SUFFOLK\*

ISLE OF WIGHT

PORTSMOUTH\*

VIRGINIA BEACH\*

ELEC0080A 03/01/2000

	Rates	Fringes
ELECTRICIANS (Including Traffic Signal Installers/Maintainers)	18.60	2.30+11.25%

+a

a. Workmen shall be allowed 2 hours with pay at the start or at the end of the work day on State and National Election Days; Tuesday following the first Monday in November, provided they are qualified and vote.

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\* ENGI0147Q 05/01/2000

	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
Crane, Derrick, Dragline Operators (Over 1 yd.)	19.78	5.18
Crane, Derrick, Dragline Operators (1 yd. & under)	18.78	5.18

File Driver Leadsman	18.78	5.18
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SUVA3051A 02/09/1999		
	Rates	Fringes
ASBESTOS WORKERS	7.97	
BLASTERS	9.00	
CARPENTERS, STRUCTURE	12.66	
CONCRETE FINISHERS	10.53	
DECKHANDS	13.49	
FENCE ERECTORS	9.50	
FLAGGERS	7.22	
FORM SETTERS	9.75	
GUARDRAIL ERECTORS	14.13	
LABORERS:		
Construction Workers II		
(Laborers)	7.68	
Construction Workers I		
(Skilled Laborers)	8.80	
Landscape Workers	7.92	
Asphalt Rakers	8.27	
Pipelayers	8.05	
Power Tool Operators	9.26	
MASONS, STRUCTURE	9.00	
PAINTERS	13.90	
PAINTERS, BRIDGE	13.08	
POWER EQUIPMENT OPERATORS:		
Air Compressor Operators	20.00	
Asphalt Distributor Operators	9.14	
Asphalt Paver Operators	9.74	
Backhoe Operators	11.74	
Bulldozer Operators	10.33	
Bulldozer Operators, Utility	10.06	
Concrete Finish Machine/Screed		
Operators (Bridge)	14.00	
Concrete Finish Machine Operators,		
Utility	11.32	
Concrete Paving Machine Operators	9.16	
Concrete Pump Operators	16.01	
Concrete Saw Operators	16.01	
Crusher Tender Operators	10.35	
Drill Operators	10.00	
Excavator Operators (Gradall		
Operators)	11.86	
Front-End Loader Operators	9.35	
Fuel and Lubricant Service		
Truck Drivers	7.23	
Grade Checkers	7.22	
Hydro-Seeder Operators	10.75	
Log Skidder Operators	15.00	
Mechanics	11.89	
Mobile Mixer Operators	10.71	
Motor Grader Operators		
(Fine Grade)	11.61	
Motor Grader Operators		

(Rough Grade)	11.87
Oiler Greasers	10.50
Pavement Marking Truck Operators	8.75
Pavement Marker Operators	10.20
Pavement Planing Operators	10.25
Pavement Planing Groundman	11.00
Pile Driver Operators	14.50
Pipe Boring/Jacking Machine Operators	8.38
Plant Operators	10.00
Roller Operators (Rough)	8.66
Roller Operators (Finish)	9.68
Scraper Pan Operators	9.50
Shot Blast Machine Operators	7.75
Shovel Operators	10.45
Slip-Form Paver Operators	10.82
Slurry Seal Paver Machine Operators	9.38
Slurry Seal paver Truck Drivers	9.00
Stabilizer Operators	7.94
Stone Spreader Operators	10.90
Subgrade Machine Operators	8.75
Tractor Operators (Crawlers)	8.02
Tractor Operators (Utility)	9.16
Transit Mix Truck Drivers	9.75
Trenching Machine Operators	10.66
REINFORCING METAL WORKERS	21.20
SHEET METAL WORKERS	8.90
SIGN ERECTORS	17.25
STRUCTURAL WORKERS	16.70
TRUCK DRIVERS:	
Heavy Duty (Over 7 c.y.)	11.03
Heavy Duty (Under 7 c.y.)	10.93
Multi, Tandem and Single Rear Axle	8.14
WELDERS	12.99

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(v)).

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In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

\* an existing published wage determination

- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U. S. Department of Labor  
200 Constitution Avenue, N. W.  
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request

review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N. W.  
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U. S. Department of Labor  
200 Constitution Avenue, N. W.  
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION



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SECTION 01055

SOIL BORING DATA

PART 1 GENERAL

1.1 GENERAL

The following pages are copies of Standard Penetration testing boring logs and Cone Penetrometer Testing (CPT) data representing the subsurface investigations in the project vicinity at Craney Island. The logs and CPT reports contained herein represent the basic subsurface conditions, but do not include all available data. Additional boring data is available for review at the Norfolk District GeoEnvironmental Branch Office (POC: Ira Brotman, PE / 757-441-7075).

1.2 BORING LOCATIONS

Soil boring and CPT locations are shown on the drawings. All boring and CPT locations and elevations are approximate.

1.3 CHARACTER OF MATERIALS

This data is included for information only. Each log is believed to show the nature of the materials encountered at that specific location and to the depth indicated on the log. Dredge material in Craney Island is composed of heterogeneous mixtures of sands, silts, and clays. Inflow of dredge material is typically from the eastern side of Craney Island, with outflow through the spill boxes located along the western side. Because of variable deposition rates, based on grain sizes, the heavier materials (sands) typically settle out first followed by the smaller materials (silts and clays). Therefore, the sandier material is typically found towards the eastern portions of Craney Island and the finer materials towards the western portions. The undrained shear strengths (cohesion) of the finer grained dredged materials (silts and clays) typically range from 100 to 400 pounds per square foot (psf). A desiccated surface crust of dredge material, of variable thickness (=15 cm to 30 cm), typically overlies the surface of the softer dredge material. Reports on previous strip drain installations elsewhere at Craney Island and dredged material shear strength data are also available for review at the Norfolk District GeoEnvironmental Branch Office (POC: Ira Brotman, PE / 757-441-7075).

1.4 BORING NOTES

1.4.1 Borings Labeled DH

Borings labeled as DH were performed in accordance with ASTM D 1586, Penetration Test and Split-Barrel Sampling of Soils.

#### 1.4.1.1 Standard Penetration Test (SPT)

The Standard Penetration Test (SPT) indicates depth of a sample and number of blows required to drive a 2 inch (50 mm) O.D. split spoon sampler 6 inches (150 mm), unless otherwise noted, into undisturbed soil with a 140 pound (0.625 kN) hammer falling 30 inches (0.75 meters). The standard penetration "N" value is the sum of the last two 6-inch drives; i.e., 6, 4, 5; N=9 or middle two 6-inch drives; i.e., 6, 4, 5, 3; N=9.

#### 1.4.1.2 Soils

Soils (ML, CL, GP, etc.) are classified in accordance with [ASTM D 2487](#), Classification of Soils for Engineering Purposes. Soils are described in accordance with Burmister's Method of Material Proportions as presented below.

<u>Descriptive or Qualifying Terms</u>	<u>Range of Proportions</u>
"Sandy", "Gravelly", etc. or the term "and"	35% to 50%
"some"	20% to 35%
"little"	10% to 20%
"trace"	1% to 10%

#### 1.4.1.3 Densities and Consistencies

Soil densities and consistencies are estimated and are based on the following tables:

Relative Density of Gravels/Sands According to Results of SPT

<u>No. of Blows N</u>	<u>Relative Density</u>
0-4	Very Loose
4-10	Loose
10-30	Medium
30-50	Dense
Over 50	Very Dense

Consistency of Clays/Silts, According to Results of SPT

<u>No. of Blows N</u>	<u>Consistency</u>
0-2	Very Soft
2-4	Soft
4-8	Medium
8-15	Stiff
15-30	Very Stiff
Over 30	Hard

#### 1.4.2 Borings Labeled CPT

Borings labeled CPT were performed in accordance with [ASTM D 3441](#), Deep, Quasi-Static, Cone and Friction-Cone Penetration Tests of Soil.

## 1.4.2.1 Penetration

Penetration was advanced using a standard electronic cone with a 60 degree apex angle and a diameter of 33.7 mm (10 cm<sup>2</sup> cross-sectional area).

## 1.4.2.2 Classification

Soils are classified in accordance with "Guidelines for Geotechnical Design using the Cone Penetration Test and CPT with Pore Pressure Measurement" by Robertson and Campanella, Hogentogler & Company, Inc., 4th Ed., Nov 1989.

## 1.4.3 Elevations

All elevation and locations are approximate.

## 1.4.4 Dates

Dates shown on logs are completion dates.

## 1.4.5 Abbreviations

Abbreviation	Meaning	Abbreviation	Meaning
BOH	Bottom of Hole	NP	Nonplastic
brn	Brown	PHI	Friction Angle
cly	Clayey	PI	Plastic Index
CPT	Cone Penetration Testing	Piez	Piezometer
CPTU	CPT w/Pore Pressure Measurements	PL	Plastic Limit
crs, c	Coarse	plast	Plasticity, Plastic
dia	Diameter	sat	Saturated
dk	Dark	som	Some
fn, f	Fine	SPT	Standard Penetration Testing
gry	Gray		
gvy	Gravelly	tr	Trace
HP	High Plasticity	v	Very
lt	Light	v.f.	Very Fine
med, m	Medium	vert	Vertical
MP	Medium Plasticity	WOR	Weight of Rod and
		&	

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

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## CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

SOIL PROFILE			SAMPLE		LABORATORY DATA										FIELD DATA					
ELEV FT.	DEPTH FT.	DESCRIPTION	SAMP NO.	DEPTH FT.	N	#200 %	sd pcf	e	G	S %	W %	LL	PL	PI	LI	Su psf	DEPTH FT.	V5 psf	VSR psf	St
+5.0	2.0	(SP) F- SAND FILL, TRACE SILT & SHELL FRAGMENTS, INDIST. BROWN	S1	1.5	15															
+3.0	3.0		S2	3.5	21															
-2.0	7.0		S3	5.5	9															
	10	(SP-S1) F-C SAND FILL, LITTLE SILT SHELL FRAGS. BROWN																		
		(SP) FINE TO COARSE SAND FILL AND SHELL FRAGMENTS, LITTLE SILT AND ORGANIC MATTER, BROWN	S4	10.5	14															
-15.0	20.0		S5	16.5	16															
		(SP) FINE TO COARSE SAND FILL AND SHELL FRAGMENTS, LOOSE, BROWN	S6	21.5	8															
	30		S7	26.5	8															
-25.0	34.0		S8	31.5	10															
	40	(TH) INORGANIC SILT AND CLAY, HIGH PLASTICITY, GRAY.	S9	36.5	4															
			U10	41.2		58.0	1.936	2.71	99.0	70.7	67	35	32	1.1						
-45.0	50.0		S11	46.5	4															
		(CH) MICRO-ORGANIC CLAY AND SIL TRACE SHELL FRAGMENTS, HIGH TO VERY HIGH PLASTICITY, GRAY.	U12	49.2		51.4	2.337	2.70	97.3	84.2	77	43	34	1.2						
	60		S13	56.5	2															
	70		S14	61.5	2															
			S15	66.5	3															
			S16	71.5	2															
		NOTE: TWO UNDISTURBED SAMPLES DESIGNATED ON FIELD LOG AS U17 WITHOUT EXPLANATION. SUSPECT NO RECOVERY WITH FIRST SAMPLE. NO LAB TESTING DONE ON U17 AND U18.	U17	74.0																
	80		U17	80.0																
			U18	83.0																
	90		S19	86.5	2															
			S20	91.5	2															
	100		S21	96.5	2															

CRANEY ISLAND DISPOSAL AREA  
PORTSMOUTH, VIRGINIA  
HOLE NO: 71C1-J  
SHEET 1 OF 2  
COORDINATES:  
N 215 628  
E 2 617 642  
DATE: JUL 30, 1971  
ELEVATION: +5.0 FT. CE: PLW  
DEPTH: 122.0 FT.  
GROUNDWATER:  
ELEVATION: +3.0 FT. CE: PLW

AGENCY:  
NORFOLK DISTRICT

REMARKS:  
DRILLED AS PART OF A  
STABILITY ANALYSIS TO  
EVALUATE RAISING LEVEES TO  
+30.0.  
FINAL LOG MISSING FROM FILE  
THIS LOG BASED ON FIELD LOG

NOTE: TWO UNDISTURBED SAMPLES DESIGNATED ON FIELD LOG AS U17 AND U18. NO RECOVERY WITH FIRST SAMPLE. NO LAB TESTING DONE ON U17 AND U18.

CRANEY ISLAND DISPOSAL AREA  
PORTSMOUTH, VIRGINIA  
HOLE NO. 71C1-3  
SHEET 1 OF 2

COORDINATES:  
N 215 628  
E 2 617 642

DATE: JUL 30, 1971  
ELEVATION: +5.0 FT. CEPLW  
DEPTH: 122.0 FT.  
GROUNDWATER  
ELEVATION: +3.0 FT. CEPLW

AGENCY:  
NORFOLK DISTRICT

REMARKS:  
DRILLED AS PART OF A  
STABILITY ANALYSIS TO  
EVALUATE RAISING LEVEES TO  
+30.0.

FINAL LOG MISSING FROM FILE  
THIS LOG BASED ON FIELD LOG

HOLE NO. 71C1-3  
SHEET 1 OF 2

CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

SOIL PROFILE		SAMPLE		LABORATORY DATA										FIELD DATA						
ELEV FT.	DEPTH FT.	DESCRIPTION	SAMP NO.	DEPTH FT.	N	#200 %	3d pcf	e	G	S %	W %	LL	PL	PI	LI	Su psf	DEPTH FT.	V5 psf	V5R psf	SL
-101.0	105.0	(CH) MICRO-ORGANIC CLAY AND SILT TRACE SHELL FRAGMENTS, HIGH TO VERY HIGH PLASTICITY, GRAY.	322	101.5	4															
-105.0	110.0		323	106.5	10															
		(CH) ORGANIC CLAY AND SILT WITH THIN LENSES OF VERY FINE SAND	324	111.5	11															
			325	116.5	12															
-117.0	122.0	BOTTOM OF HOLE AT 122.0 FT.	326	121.5	10															

CRANEY ISLAND DISPOSAL AREA  
PORTSMOUTH, VIRGINIA  
HOLE NO: 71CI-3  
SHEET 2 OF 2  
COORDINATES:  
N 215 628  
E 2 517 642  
DATE: JUL 30, 1971  
ELEVATION: +5.0 FT. CEMW  
DEPTH: 122.0 FT.  
ELEVATION: +3.0 FT. CEMW

AGENCY:  
NORFOLK DISTRICT

REMARKS:  
DRILLED AS PART OF A  
STABILITY ANALYSIS TO  
EVALUATE RAISING LEVEES TO  
ELEVATION +30.0.  
FINAL LOG MISSING FROM FILE.  
THIS LOG BASED ON FIELD LOG.

HOLE NO: 71CI-3  
SHEET 2 OF 2



## SECTION 01066 DECK &amp;

HOLE NO: 81DII-1  
SHEET 1 OF 2

# CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

SOIL PROFILE		SAMPLE		LABORATORY DATA										FIELD DATA				CRANEY ISLAND DISPOSAL AREA			
ELEV FT.	DEPTH FT.	DESCRIPTION	SAMP NO.	DEPTH FT.	N	#200 %	30 pcf	e	G	S R	W %	LL	PL	PI	LI	Sh pcf	DEPTH ELEV-FT	VS PSF	VSR PSF	St	
-91.2		10% CLAY, TRACE FINE SAND, WET, DARK GRAY.	S24	105.0	WOR																
-96.2	105.0	BOTTOM OF HOLE AT 105.0 FT.																			
	110	WATER ON ROD AT 7.0 FT.																			
	120	WATER ON COMPLETION-CAVE IN AT 1.5 FT.																			
	130																				
	140																				
	150																				
	160																				
	170																				
	180																				
	190																				
	200																				

DATE: JAN 5, 1982  
ELEVATION: 0.8 FT. CDPLW.  
DEPTH: 105.0 FT.  
GROUNDWATER:  
ELEVATION: +1.8 FT. CDPLW.

AGENCY:  
SCHNABEL ENGINEERING  
ASSOCIATES, RICHMOND, VA.

REMARKS:  
DRILLED FOR THE WEST LEVEL  
ALIGNMENT STUDY.

HOLE NO: 61DH-1  
SHEET 2 OF 2



# CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

SOIL PROFILE			SAMPLE		LABORATORY DATA										FIELD DATA				CRANEY ISLAND DISPOSAL AREA	
ELEV FT.	DEPTH FT.	DESCRIPTION	SAMP NO.	DEPTH FT.	#200 %	3d pcf	e	G	S %	W %	LL	PL	PI	LI	Su psf	DEPTH/ ELEV-FT	VS psf	YSR psf	St	
+6.8		(SP) FINE TO COARSE SAND, TRAIL SILT WITH SHELL FRAGMENTS, MOIST, TAN	S1	1.0	11															
			S2	3.0	22															
			S3	6.0	6															
	10		S4	8.0	6															
5.2	12.0	FINE SAND, WET, GRAY.	S5	10.0	3															
-8.2	15.0	(CH) CLAY FILL, TRACE FINE SAND WITH SHELL FRAGMENTS, MOIST, DARK GRAY.	S6	15.0	11															
	20	(SP) FINE TO MEDIUM SAND FILL, TRACE SILT WITH SHELL FRAGMENT MOIST, DARK GRAY.	S7	20.0	11															
	30	FINE TO COARSE SAND, WET, TAN AND GRAY.	S8	25.0	16															
			S9	30.0	13															
-31.2	35.0		S10	35.0	8															
	40	(SC) FINE TO COARSE SAND FILL, SOME SILTY CLAY WITH SHELL FRAG- MENTS, MOIST, GRAY, INTERBEDDED CLAY AND FINE GRAVEL WITH DEPTH	S11	40.0	7	5	95	2.74	22.3	52	16	36	0.2							
			U1	42.0	6															
	50		S12	45.0	6															
			S13	50.0	10															
-50.2	55.0		S14	55.0	7															
	60	(SP) FINE TO COARSE SAND FILL, TRACE SILT, WET.	S15	60.0	8															
	62.0	BROWN AND GRAY	S16	65.0	9															
	70	(CH) CLAY, TRACE FINE SAND WITH SHELL FRAGMENTS, MOIST, GRAY.	S17	70.0	5	99	65	2.62	54.7	64	25	39	0.8							
			U2	72.0	2															
			S18	75.0	2															
	80		S19	80.0	WOR															
		DARK GRAY.	S20	85.0	WOR															
	90		U3	90.0	WOR															
		NO FINE SAND OR SHELL FRAGMENTS	S21	92.0	WOR	100	61	2.68	63.4	69	32	37	0.8							
			S22	100.0	WOR															

CRANEY ISLAND DISPOSAL AREA  
PORTSMOUTH, VIRGINIA  
HOLE NO. 810M-2  
SHEET 1 OF 2  
COORDINATES  
N 216 320  
E 2 617 670  
DATE: DEC 23, 1981  
ELEVATION: 68 FT. CEMW  
DEPTH: 105.0 FT.  
GROUNDWATER:  
ELEVATION -0.2 FT. CEMW.

AGENCY:  
SCHNABEL ENGINEERING  
ASSOCIATES, RICHTON, VA

REMARKS:  
DRILLED FOR THE WEST LEVEL  
ALIGNMENT STUDY

WELL NO. 81DM-2  
SHEET 1 OF 2

# CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

SOIL PROFILE		SAMPLE		LABORATORY DATA										FIELD DATA						
ELEV FT.	DEPTH FT.	DESCRIPTION	SAMP NO.	DEPTH FT.	N	#200 %	3/4 PCF	#	G	S %	W %	LL	PL	PI	LI	SU PSF	DEPTH/ ELEV-FT	VS PSF	VSR PSF	ST
-93.2																				
-98.2	105.0	100% CLAY, MOIST, DARK GRAY.	523	105.0	WOR															
	110	BOTTOM OF HOLE AT 105.0 FT.																		
		WATER ON ROD AT 7.0 FT.																		
		WATER AT COMPLETION 10.5 FT.																		

CRANEY ISLAND DISPOSAL AREA

PORTSMOUTH, VIRGINIA

HOLE NO. 810H-2

SHEET 2 OF 2

COORDINATES:

N 216 320

E 2 617 670

DATE: DEC 23, 1981

ELEVATION: 6.0 FT. CDPLW.

DEPTH: 105.0 FT.

GROUNDWATER:

ELEVATION: -0.2 FT. CDPLW.

AGENCY:

SCHINABEL ENGINEERING

ASSOCIATES, RICHMOND, VA.

REMARKS:

DRILLED FOR THE WEST LEVEL

ALIGNMENT STUDY.

HOLE NO. 810H-2

SHEET 2 OF 2



## CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

[illegible]

HOLE NO: E1DH-3  
SHEET 1 OF 1

# CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

SOIL PROFILE			SAMPLE		LABORATORY DATA										FIELD DATA				CRANEY ISLAND DISPOSAL AREA	
ELEV FT.	DEPTH FT.	DESCRIPTION	SAMP NO.	DEPTH FT.	N	#200 %	3d pcf	e	G	S %	W %	LL	PL	PI	LI	SU PSF	DEP TH/ ELEV-F	VS PSF	VSR PSF	ST
+8.5		(SM) FINE TO MEDIUM SAND F.L., SOME SILT WITH SHELL FRAGMENT'S MOIST, TAN. --- TRACE SILT. ---	S1	1.0	13															
	10	FINE SILTY SAND WITH SHELL FRAG- MENTS, WET, LIGHT GREEN	S2	3.0	43															
			S3	6.0	49															
			S4	8.0	39															
			S5	10.0	24															
			S6	15.0	3															
-10.5	18.0	(SP) FINE TO MEDIUM SAND, TRACE SILT, WET, GRAY.	S7	20.0	14															
			S8	25.0	8															
-20.5	28.0	(CH) CLAY, TRACE FINE SAND, WET, DARK GRAY.	S9	30.0	2															
			S10	37.0	2															
			S11	40.0	WOR															
			S12	45.0	WOR												35.0 -26.5	450	190	2.4
			S13	50.0	WOR															
			S14	55.0	WOR															
			S15	62.0	WOR															
			S16	65.0	WOR															
			S17	70.0	WOR															
			S18	75.0	WOR															
			S19	80.0	WOR															
			S20	87.0	WOR															
			S21	90.0	WOR															
			S22	95.0	WOR															
-88.5	97.0	BOTTOM OF HOLE AT 100.0 FT. WATER ON ROD AT 9.0 FT. WATER AT COMPLETION-CAVE IN AT 1.2 FT.	S23	100.0	R															
-91.5	100	(CH) CLAY, TR F-SAND W/ ORGANIC MATTER, MOIST, DARK GRAY.																		

HOLE NO. 810H-4  
SHEET 1 OF 1



CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

# USAED Vicksburg

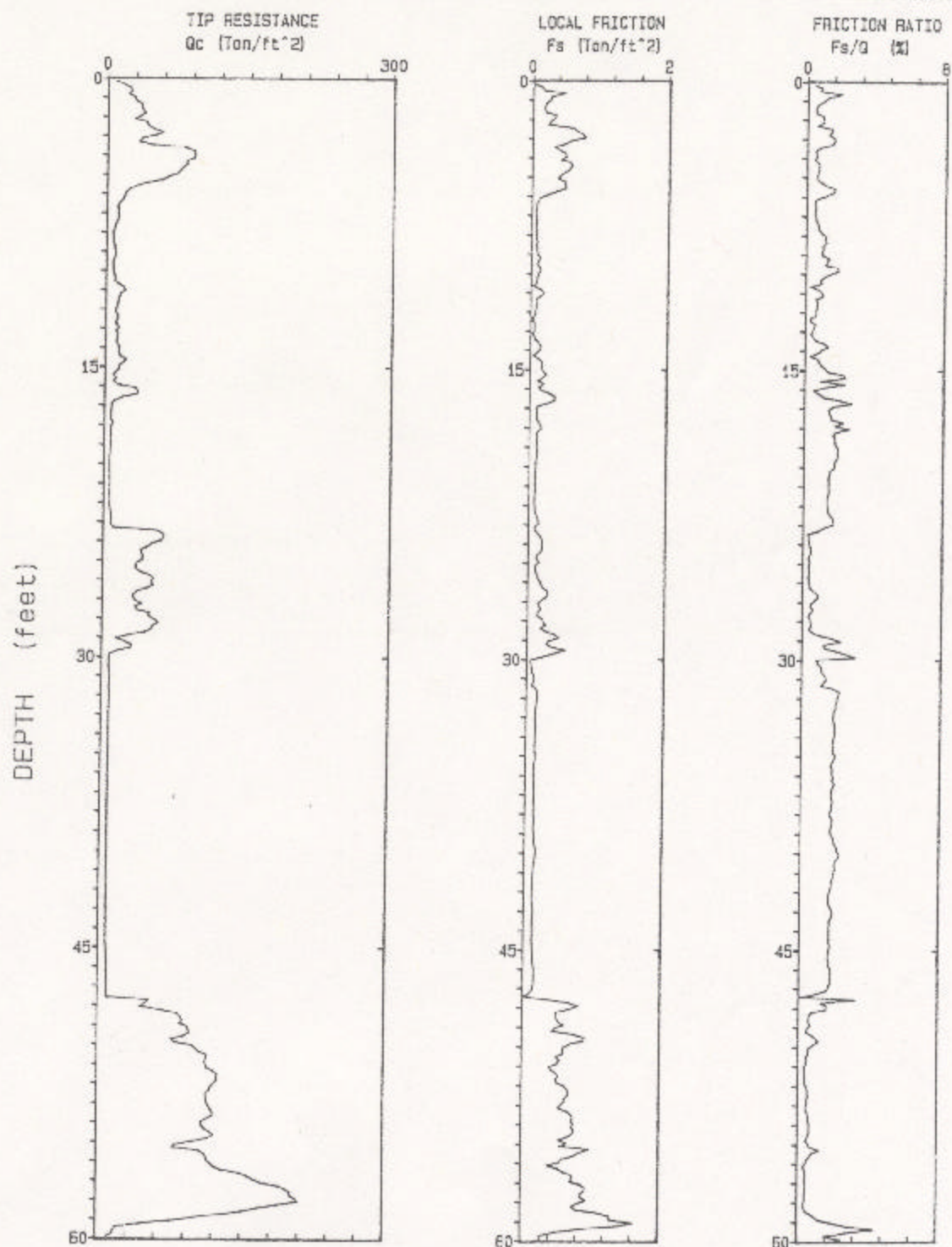
Project: CRANEY ISLAND

Date: 3-12-92

Hole No.: 92CP-11 (1/3)

Cone No.: 407

Elevation: 20.0



Depth Increment : .05 m

Max Depth : 149.93 ft

CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

# USAED Vicksburg

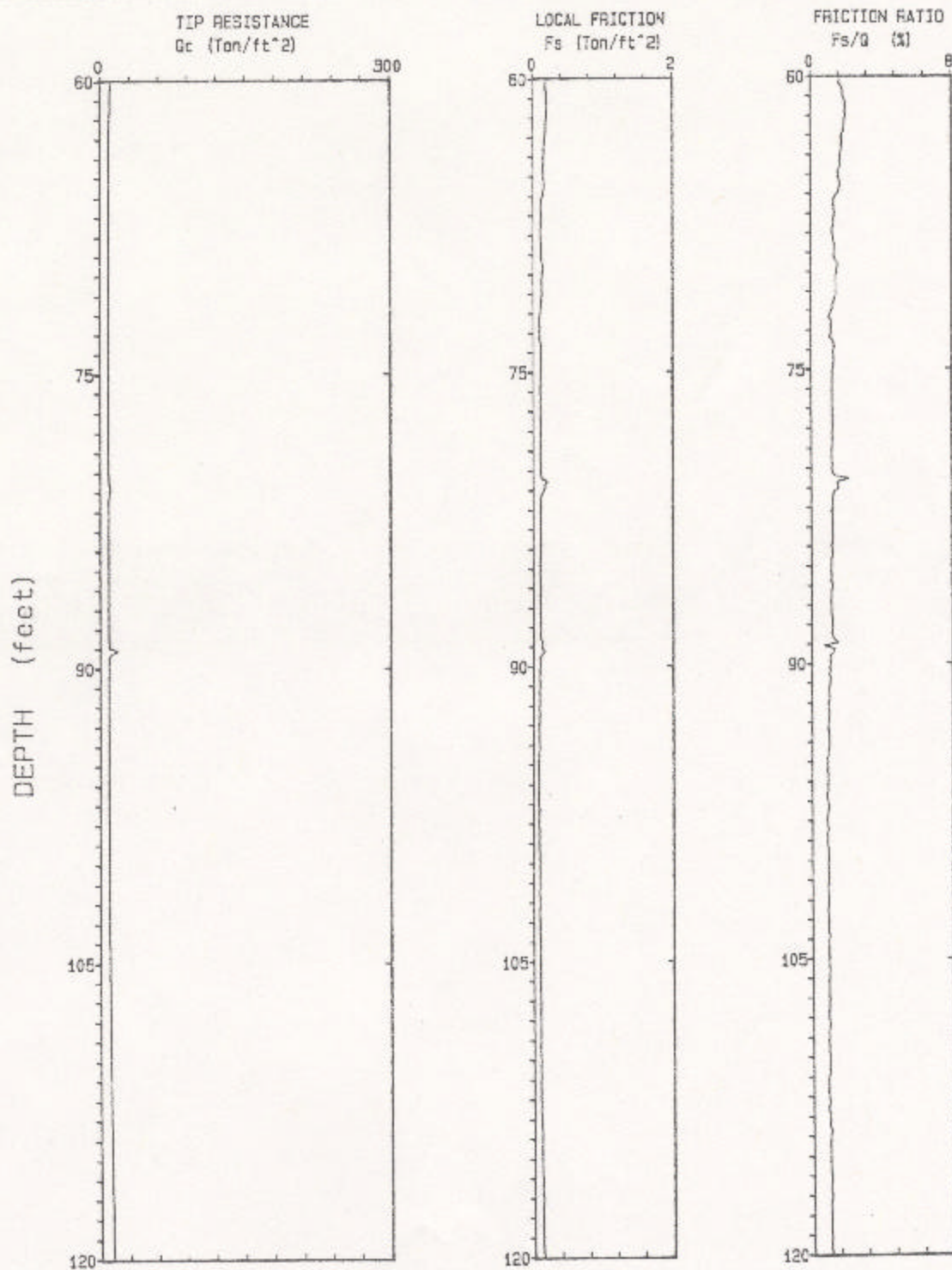
Project: CRANEY ISLAND

Date: 3-12-92

Hole No.: 92CP-11 (2/3)

Cone No.: 407

Elevation: 20.0



Depth Increment : .05 m

Max Depth : 149.93 ft

CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

# USAED Vicksburg

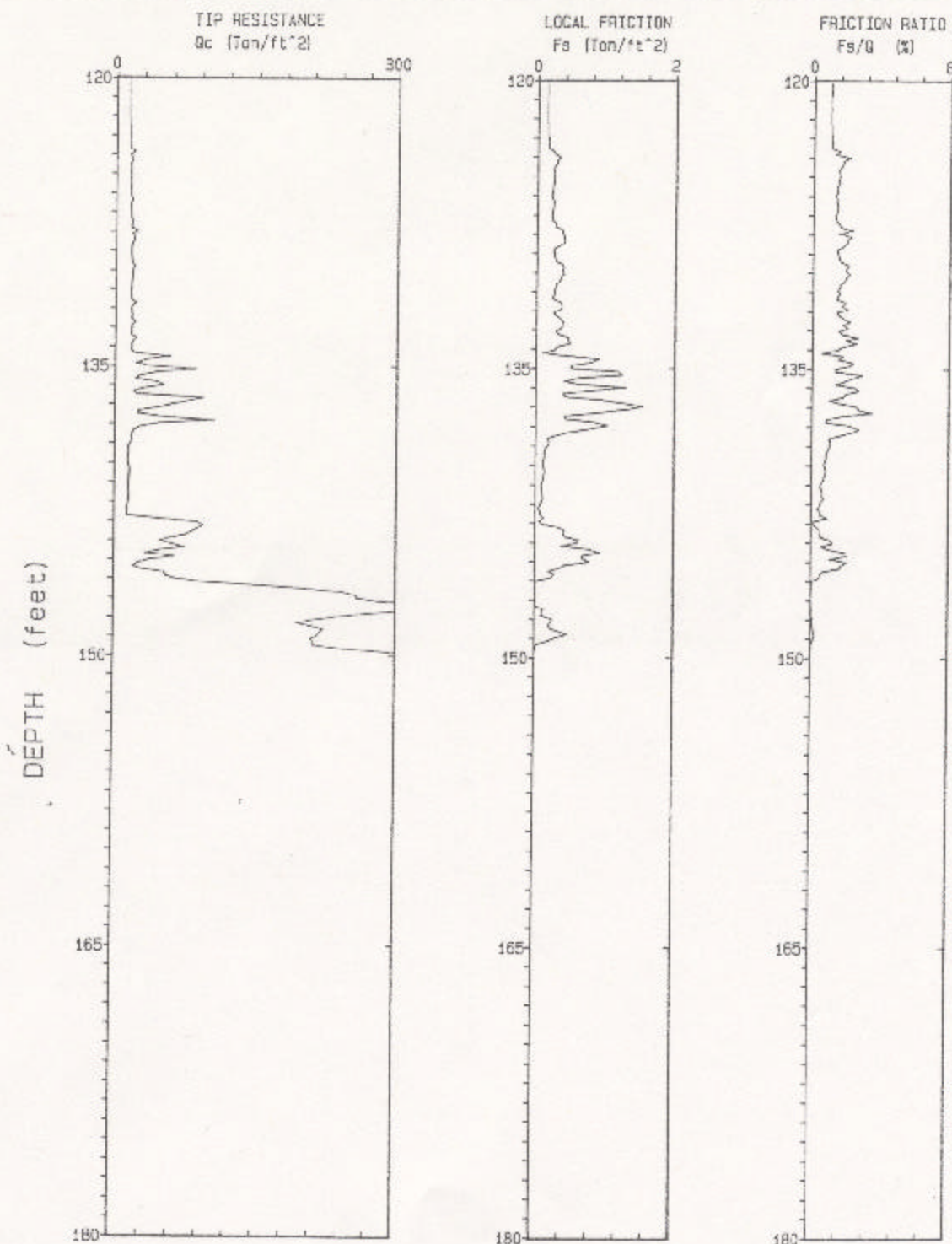
Project: CRANEY ISLAND

Date: 3-12-92

Cone No.: 407

Hole No.: 92CP-11 (3/3)

Elevation: 20.0



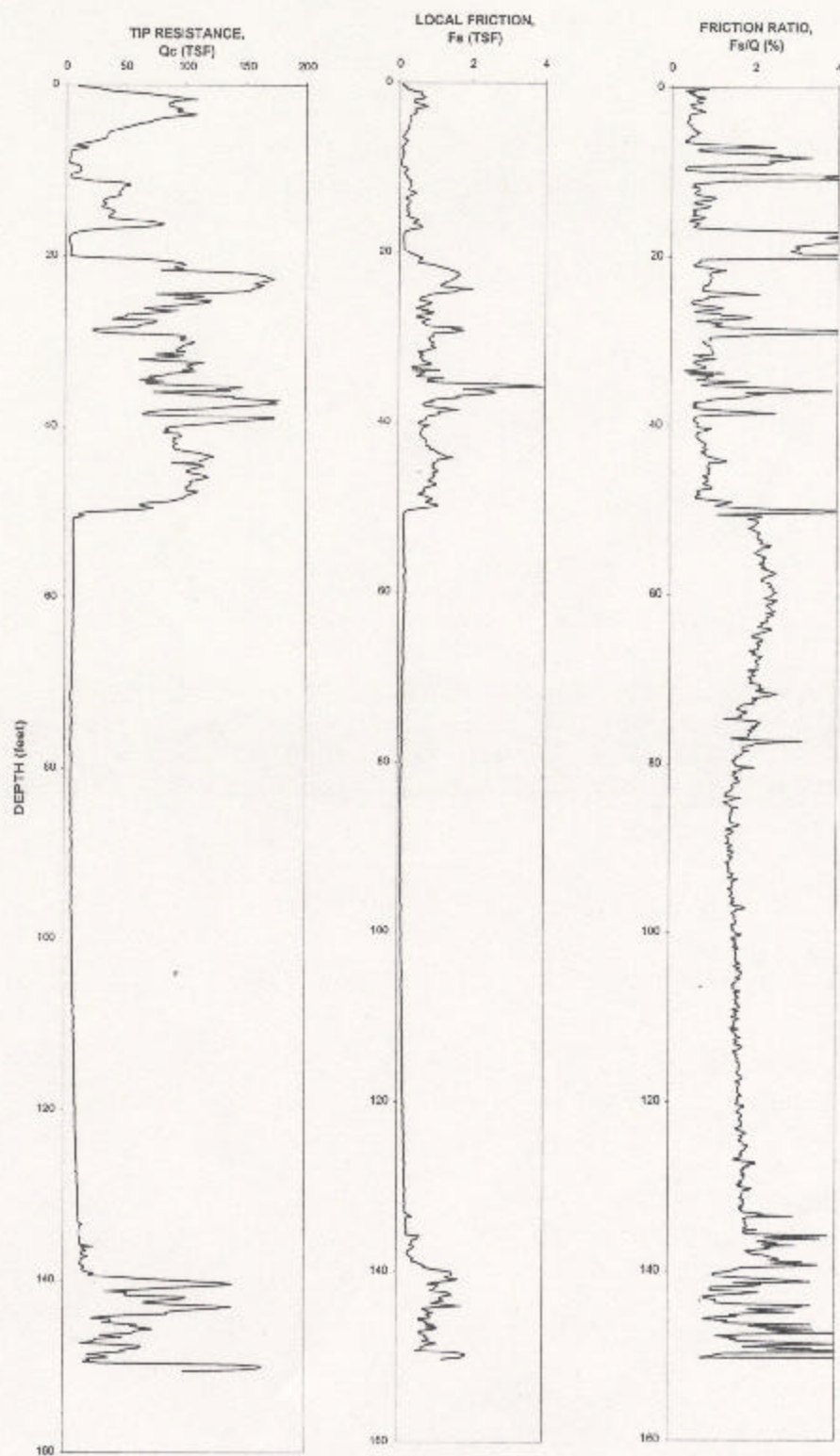
Depth Increment : .05 m

Max Depth : 149.93 ft



CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

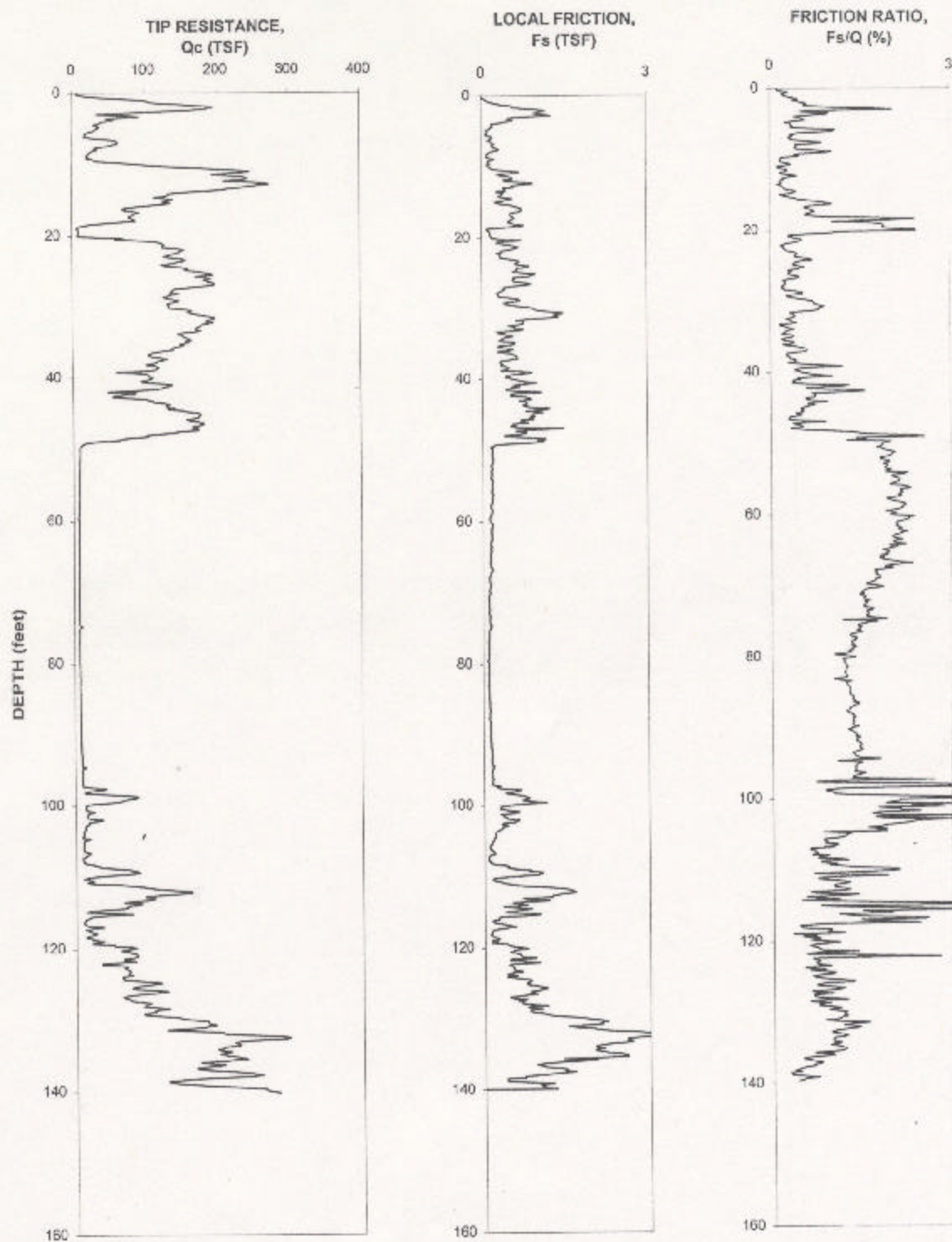
93CP-10





CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

93CP-11



CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

# USAED Vicksburg

Project: CRANEY ISLAND

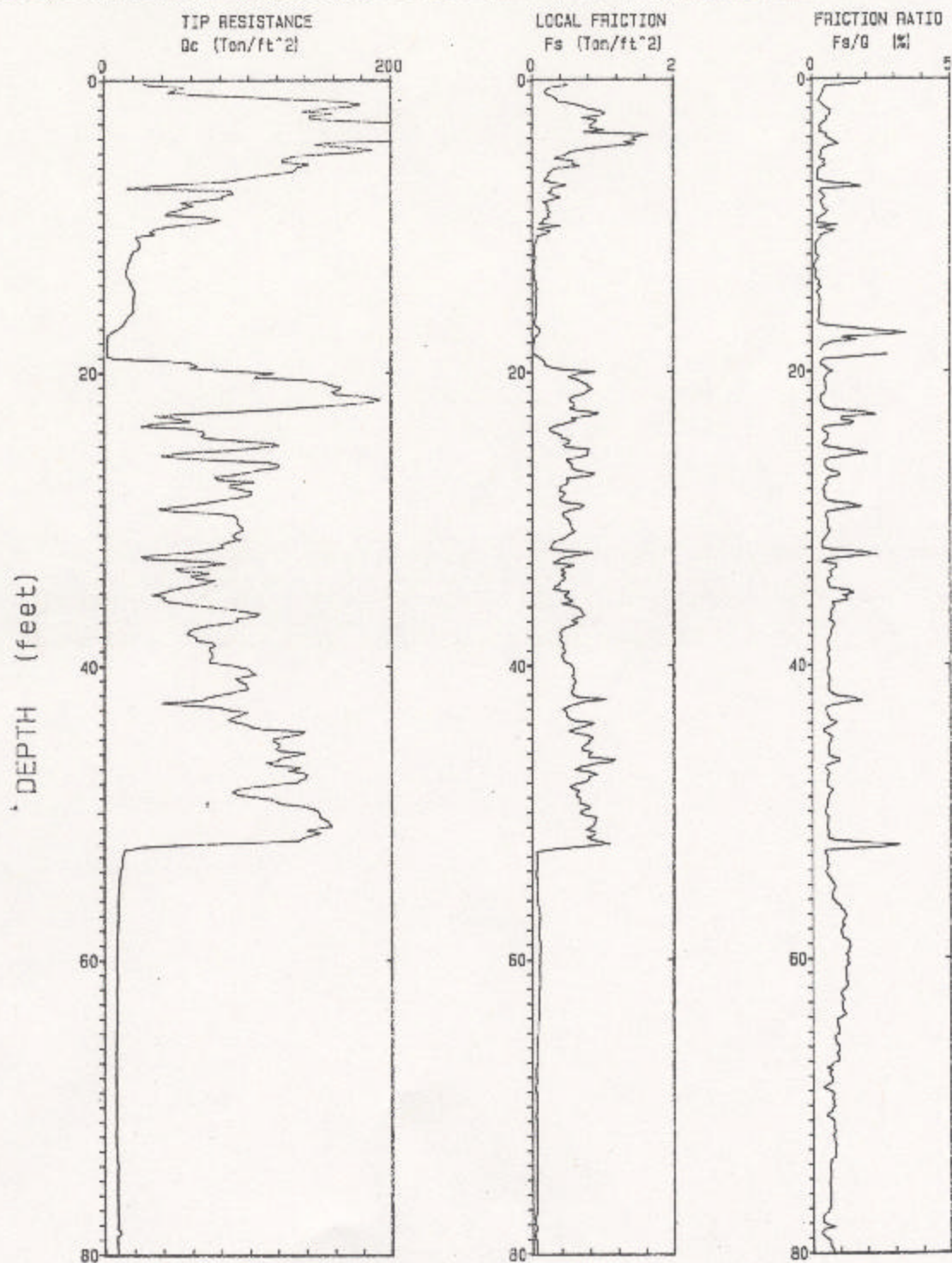
Date: 08-24-94

ELEV. 22.0

Hole No.: 94CP-10 (1/2)

Cone No.: 342

STATION:



Depth Increment : .05 m

Max Depth : 151.57 ft

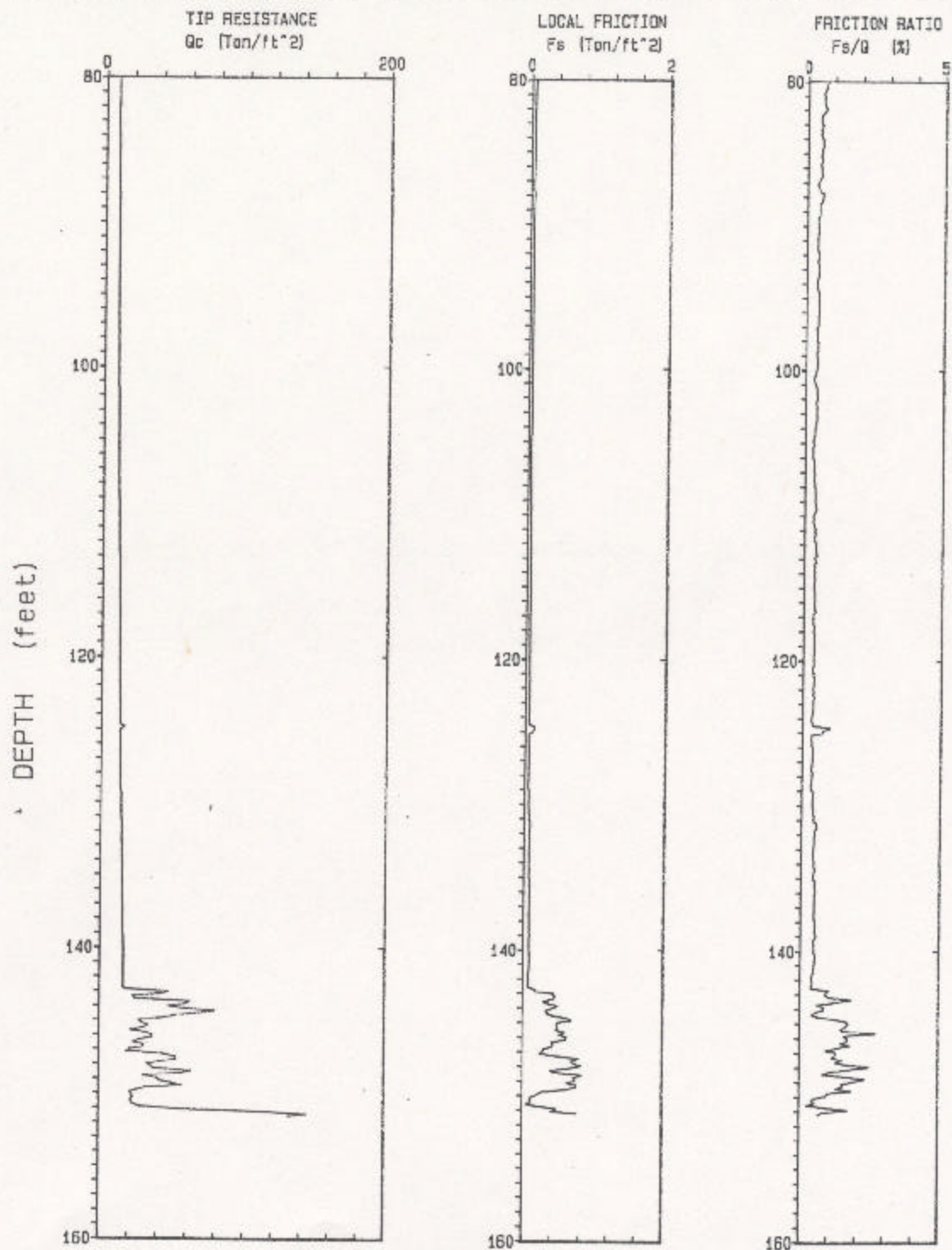


CRANEY ISLAND STRIP DRAINS - MIDWEST DIKE

# USAED Vicksburg

Project: CRANEY ISLAND  
ELEV. 22.0  
Cone No.: 342

Date: 08-24-94  
Hole No.: 94CP-10 (2/2)  
STATION:



Depth Increment : .05 m

Max Depth : 151.57 ft